

ABSTRACT OF THE DISCLOSURE

In the case of generating plasma under atmospheric pressure, the particle generated due to generation of high-density plasma is to be a cause of a defect such as a point defect or a line defect of a display portion in a display device. The present invention is offered in view of the 5 above situation, and provides a plasma treatment apparatus for suppressing generation of a particle. According to the present invention, plasma is generated in a limited minimum region to be treated by a plasma treatment over a substrate to be treated. Generation of a particle is suppressed to a minimum by providing a plurality of plasma generation units generating minimum plasma having a similar size as the limited minimum region, changing a relative 10 position of the plurality of plasma generation units and the substrate to be treated, and performing a plasma treatment to a limited predetermined region.